55.05

U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE
CALIFORNIA FOREST AND RANGE EXPERIMENT STATION
Division of Forest Insect Research

FOREST INSECT CONDITIONS
FOREST RECREATIONAL AREAS, SOUTHERN CALIFORNIA
OCTOBER 1955
RECONNAISSANCE SURVEY

The period of October 17 to October 21, 1955 was spent by the author in making a reconnaissance of forest insect conditions in southern California recreational areas, in company with representatives of the forest land managing agencies concerned. The survey was made mainly to gather information concerning present forest insect conditions in these areas and to determine the needs of the various management agencies for technical assistance. It included visits to the Supervisors' offices of the Angeles and San Bernardino National Forests, the Deputy State Forester's office of the California Division of Forestry in Riverside, the Mt. Baldy and Valyermo Ranger Districts of the Angeles, the Arrowhead and San Jacinto Districts of the San Bernardino, and the Descanso District of the Cleveland National Forest. Cuyamaca Rancho State Park and private land surrounding the town of Julian were also visited. Conditions noted and suggestions for control are given as follows, by areas:

Arroyo Seco District - Angeles National Forest

The Arroyo Seco District was not visited; however, present conditions were discussed with Assistant Ranger Lynn Biddison. The District was reported to be relatively free of insect-caused losses and very little control has been necessary this year. About 30 trees containing broods of the western pine beetle and the California flatheaded borer have been treated so far, most of these occurring around the edge of the Sulphur Burn. Additional insect control work around the fire area will probably be required this winter and next spring.

Mt. Baldy District - Angeles National Forest

Ranger Lewis was contacted at his office in Glendora and the insect situation on the District was discussed. The only control project on the District is at Crystal Lake where losses have been light this year. Year-round maintenance control against broods of the pine bark beetles has proven effective in keeping losses down on this control project.

Several new ski runs are being prepared in the Mt. Baldy area which could cause pine bark-beetle problems; however, the District has required the operator to dispose of the slash.

Big Pines-Wrightwood - Angeles and San Bernardino National Forests

The Big Pines area was visited with Ranger Beardsley, Resources Officer Armstrong, and Bachman from the Regional Office. Sanitation-salvage logging to prevent bark beetle-caused losses is progressing satisfactorily, with approximately two and one-half million board feet logged so far.

The operators are logging most of the optional areas along with the required areas. From the standpoint of insect control, this action should make the total job more effective. With the removal of the high-risk trees, the salvage of dead trees, and the felling of snags in the logged area, there is a noticeable improvement in the appearance of the stand. It is too early to determine the effect of the logging on the loss pattern within the area; however, no new fades were noted. The slash was examined and no pine engraver problem was found in the Big Pines sale area.

In the Wrightwood area, slash from logging on private lands has produced broods of pine engraver beetles which are now causing some topkilling of surrounding green trees. Ten newly fading trees or so were observed at the time of the survey and more may appear later.

No control is advisable for the currently infested green trees, but prevention of future loss by pine engraver beetles through lopping and scattering of fresh slash or the chemical treatment of fresh slash should be encouraged.

Arrowhead District - San Bernardino National Forest

Control activities within the Arrowhead zone of infestation are keeping losses on government land low. About 100 trees have been treated on government land so far, about half of which were the result of the Panorama Burn. No control has been done on private lands, due to delays in executing the federal, State, and private cooperative control agreement. Funds for this project should be forthcoming in the near future, as action has been taken to renew the agreement.

The number of trees to be treated on private lands has increased steadily over the summer, as would be expected, with no control being carried on. The Lake Gregory and Valley of Enchantment area is sustaining the heaviest loss. A good deal of this beetle-killed loss apparently is associated with a black pine leaf scale infestation present in the area. Experimental studies with malathion sprays to control the black pine leaf scale were conducted this past summer. The results are very promising, but more information is needed concerning the importance of the scale in causing the death of the trees.

Some of the insect-caused loss associated with the Panorama Burn is being removed by the Grand Timber Company. This Company is making small diameter peeler logs out of the fire-killed timber and is also picking up the insect-killed trees in the immediate vicinity of the operation.

San Jacinto District - San Bernardino National Forest

No control has been started in the San Jacinto zone of infestation this fiscal year, owing to personnel being out on fires and because of delays in executing the cooperative agreement similar to those mentioned for the Arrowhead District. This year, for the first time, the agreement is being amended to include participation by the federal government in financing control on private lands up to 25 percent of the total cost. The same type of agreement has been in effect on the Arrowhead-Crestline project for several years.

The current status of the insect damage on the District is light loss north of Idyllwild and heavy loss south, around Mountain Center and Garner Valley. The California flatheaded borer is the insect responsible for the loss on the south end of the District. The control work against this insect that was started last year is to be continued this year.

The losses in the northern parts of the District are caused mainly by the mountain pine beetle and the western pine beetle. If the damage caused by these insects is to be kept to a minimum, these light losses should be treated, as in the past, by a program of year-round maintenance control.

Julian - San Diego County

Julian was shrouded in a blanket of fog when the survey was made. In spite of this, two large groups of infested trees were examined. These groups were found to contain trees topkilled by the pine engraver beetle and subsequently infested and killed by the western pine beetle. The losses undoubtedly are attributable to the logging slash in the vicinity. Apparently the slash had been laid down over a period of several months, as it contained both abandoned and currently infested pine engraver galleries. Paul Sischo of the State Division of Forestry, having seen the area on a clear day, stated that there were several areas about Julian where similar damage is occurring.

In recent years the Julian area has continually sustained losses caused by pine engraver beetles and the western pine beetle. Most of these losses have resulted from logging slash on private lands in which pine engraver broods have developed and spread to surrounding green trees. Trees attacked by pine engravers have subsequently been attacked by the western pine beetle, which is an aggressive tree killer.

If further losses are to be prevented, direct control of the western pine beetle-infested trees by penetrating oil sprays should be undertaken, but only if adequate slash disposal measures are adopted for the Julian area. Either lopping and scattering of the fresh slash prior to piling and burning or chemical treatment of the fresh slash will meet the needs of adequate slash disposal. The use of a portable chipper in disposing of logging slash offers possibilities for areas such as this. No control program should be attempted until slash control measures are adopted, for the benefits of control would be quickly offset by further logging as it is now practiced in this area.

Cuyamaca Rancho State Park

This area is covered in a separate report.1/

Descanso District - Cleveland National Forest

The Mt. Laguna recreational area on the Descanso District was visited with Ranger Britton. Control of the western pine beetle in Coulter pine has been in progress at Mt. Laguna for several years and has been successful in holding losses to the very minimum. No control has been necessary against this insect at Mt. Laguna this year. At the time of the visit not a single western pine beetle-infested tree was found.

No control of the California flatheaded borer at Mt. Laguna has been attempted in recent years, although severe losses in Jeffrey pine caused by this insect have been sustained. Losses this year continue at a high level.

Experimental spray tests this past summer, using DDT applied to the foliage to kill flatheaded borers, show considerable promise. The favorable results of this preliminary work indicate a need for further field tests on a larger scale. The possibility of using a portion of the Mt. Laguna area as a spray test area has been mentioned on several occasions in the past, and this possibility was discussed briefly with Ranger Britton on this trip. When plans for such field tests crystallize more fully, the Forest and Regional Office will be informed so that arrangements for the work can be made.

According to Ranger Britton, losses at Corte Madera are continuing at a low level this year. Year-round maintenance control is being carried on in this area against the western pine beetle, the mountain pine beetle, and the California flatheaded borer. Losses caused by these insects have dropped steadily since the beginning of the maintenance control program a few years ago.

1/ Downing, G. L. Forest Insect Conditions, Cuyamaca Rancho State Park, San Diego County, California, October 1955. Appraisal Survey. C.F.& R.E.S., Berkeley, Calif. Nov. 16, 1955.

Berkeley, California
December 1, 1955

G. L. Downing
Entomologist